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## PATENT SPECIFICATION

265,572

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## COMPLETE SPECIFICATION.

## Improvements in or relating to Race Tracks, and to Optical Projection Apparatus for use therewith.

I, PETER WILLIAM MEINCKE, a citizen of the United States of America, of 550, First Avenue, North, Box 115, St. Petersburg, in the County of Pinellas, and of Sarasota Kennel Club, Room 707, 1st National Bank, Sarasota, both in the State of Florida, United States of America, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to improvements in picture projection apparatus, and an object of the invention is to so incorporate and combine a picture projecting apparatus with a race track so as to stimulate the racing instincts of racing animals, for example greyhounds and whippets.

Other objects and advantages will appear in the following Specification, reference being had to the accompanying drawings, in which,

Figure 1 is a perspective view of a fragment of the race track showing how the picture projection apparatus is used in connection therewith.

Figure 2 is a detail plan view of the race track, illustrating the location of the screen upon which the picture is projected.

Figure 3 is a detail perspective view illustrating one way of mounting the projection lantern upon the undulating track.

Figure 4 is a detail cross section taken substantially on the line 4—4 of Figure 3.

In order to amplify the foregoing objects of the invention, it may be stated that the improved projection apparatus is intended to be used for throwing a picture of a rabbit, for example, upon a screen that follows the track upon

which greyhounds and whippets are started for racing. The projected picture may either be animated or still, but in either case the projecting lantern is made to travel so that the picture of the rabbit is kept in front of the racing animals. The racing instinct of the animals is thereby stimulated.

Reference is had to the drawing. The race track 1 is of generally oval configuration (Figure 2), and it may be constructed in any manner usually employed in practice. It may be fenced at 2 on the inside. There is a screen 3 on the outside. This screen stands on an incline and may be composed either of boards painted white, muslin stretched upon a suitable frame or anything else that will serve the purpose of a screen.

It is observed that the screen 3 follows the contour of the race track 1. Although the screen stands at an incline it is sufficiently high to serve the purpose of a fence or guard on the outside of the track. The screen stands in such relationship to the track that the racing animals can keep the projected picture in view, but the particular inclination of the screen will prevent the animals from running up thereupon. In this respect the screen serves as a barrier. This act on the part of the animals might be expected but is not desired.

The race track 1 is illuminated by electric or other lamps which are provided with appropriate shades 4, throwing the light down upon the track 1 but avoiding the screen 3. The light of the electric lamps must not interfere with the projected picture. The electric lamps are not shown, but the reader can easily understand that in practice they are beneath the shades 4. The lamps and shades are carried by standards 5.

Situated in the substantial center of

the race track oval is a tower 6. This tower is centered in the infield as shown in Figure 2. The tower may obviously be of desired type, and the construction thereof may be of metallic or wooden framework.

A lantern 7 (Figures 1 and 3) projects a picture of a rabbit 8 (Figure 1) upon the continuous screen 3 by means of the beam of light 9. The light beam is produced by any appropriate means, no attempt being made herein at showing a source of light. However, it is commonly known that picture projectors operate by oil, gas and electric lights and it is deemed sufficient to say that any known mode of illumination can be employed in the lantern or projector 7.

The picture 8 may either be animated or still. In the former instance the projector 7 will be a motion picture machine, in the latter instance it will be a stereopticon. In either case the projector is made to travel a path conforming to the general shape or contour of the screen 3, but on a smaller scale. The projector is mounted upon a carriage 10 (Figures 3 and 4) to which it is clamped by appropriate means 11. Pairs of preferably flanged wheels 12 ride upon the double rails 13 of the foregoing track. The carriage includes downward projections 14 which carry the axles 15 of the wheels mentioned. The inner projections are somewhat longer (Figure 4) carrying an extra pair of wheels 16 which run beneath the inner rail 13. The inner rail 13 and the pair of wheels 16 provide a guard which prevents the carriage from riding off of the track.

As stated before, the track conforms with the screen 3 but is on a much smaller scale. This track is mounted on top of the tower 6 (Figure 1), and the track is of an undulating nature so that the projected picture of the rabbit 8 will appear to be running up and down on the screen 3, thereby simulating the natural actions of the pursued animal.

Any appropriate means may be employed for moving the projector 7 upon its track. One of the means that may be employed consists of an electric or other motor 17 (Figure 3) which is appropriately geared at 18 with a shaft 19 to which the reach rod 20 is connected. The ratio of the gearing must be such that the picture 8 will traverse the screen 3 at an appropriate speed. It must not travel too fast, and yet fast enough to keep well in front of the pursuing animals.

The reach rod 20 is telescopic in nature, consisting of a sleeve 21 and stem 22. The necessity for the telescopic connec-

tion is obvious. The projector track is oval, and the reach rod 20 will therefore have a longer reach as the longitudinal ends of the track are approached. A ball and socket joint 23 forms the connection between the telescopic reach rod and the carriage 10, and the stem 22 has a swivel connection 24 with the upper end of the shaft 19.

The operation is readily understood. The apparatus is employed at night or in an appropriately darkened location where daylight will not interfere with the projected picture 8. As already stated, the screen 3 follows the contour of the race track 1, and stands in such position in relation thereto that the picture 8 may be projected thereupon within view of the racing animals and yet prevent such animals from running up upon the screen in pursuit of the imagined quarry.

The central tower 6 is of such height that the beam of light 9 will pass over the tops of the lamp shades 4 and strike the screen 3 as well illustrated in Figure 1. The race track 1 is illuminated by electric or other lamps (not shown) and the purpose of the shades 4 is to confine the light to the race track, keeping it away from the screen 3.

Upon starting the travel of the projector 7 upon its track, for example by starting the motor 17, the carriage 10 which in this instance has a projector 7, will continuously throw a beam of light and the picture (either animated or still) upon the screen 3. The racing animals seeing the picture will follow in pursuit. The track rails 13 are undulating in nature, giving the projected picture an up and down motion upon the screen, simulating the natural jumping action of a rabbit. It is observed that the rails 13 are inclined in the direction of the screen, that is to say one rail is higher than the other so as to give the projector 7 the necessary slant. The rails may be arranged otherwise, and similarly, the projector may be mounted otherwise and yet be made to throw the beam of light in the desired downward direction. The illustration of the motor 7 implies an electrical mode of moving the projector. The projector may be moved otherwise, for example by hand, but the electrical mode is deemed preferable. It has also been stated that the mode of illumination may be variable, any of the common forms being usable for the purpose of projecting a picture upon the screen 3.

While the construction and arrangement of the improved picture projecting apparatus is that of a generally preferred

265,572

3

form, obviously modifications and changes may be made without departing from the spirit of the invention or the scope of the claims.

5 Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

10 1. A race track along which a screen is disposed continuously, said screen being arranged to intercept a picture thrown thereupon by a projector, there being means for moving the projector so that the picture traverses the screen in the direction of the length of the race track, substantially as and for the purpose set forth.

20 2. The structure of Claim 1 further characterized by means which imparts an auxiliary motion to the projector thereby adding undulations to the motion of the projected picture, substantially as and for the purpose set forth.

25 3. The structure of Claim 2 further characterized by the provision of a carriage upon which the projector is mounted, there being a track upon which the carriage is movable conforming in general shape to that of the race track but being on a reduced scale, the means for moving the carriage upon the track causing the projected picture to travel along the screen, substantially as and for the purpose set forth.

35 4. The structure of Claim 3 further characterized by the formation of undulations in the track giving the carriage an up and down motion and causing the picture to undulate upon the screen, substantially as and for the purpose set forth.

40 5. The structure of Claim 1 further characterized by the provision of shaded lamps along one edge of the race track, the projector being centrally located in respect to the race track at a height sufficient to cause the light beam of the projector to pass over the shades and

strike the screen, substantially as and for the purposes set forth. 50

6. The structure of Claims 1 and 5 further characterized by the disposal of the shaded lamps along the inner edge of the track and the screen along the outer edge out of range of the light from said lamps, the screen being disposed at an inclination in respect to the race track to receive a picture which is projectible thereupon over the tops of the shaded lamps, substantially as and for the purposes set forth. 55 60

7. The structure of Claim 3 further characterized by the provision of double rails in said continuous track, said carriage having pairs of wheels running on top of the rails and other wheels running beneath one of the rails thereby constituting a guard, the means for moving the carriage including a motor driven shaft and a reach rod connecting the shaft with the carriage, said reach rod being telescopic to compensate for variations in the distance of the track from the shaft and having freely movable connections at the extremities with the carriage and shaft respectively, substantially as and for the purpose set forth. 65 70 75

8. The structure of Claim 1 further characterized by the disposal of the continuous screen along one edge of the track so as to constitute a barrier, the projector for throwing a picture upon the screen being arranged for such movement that the picture will traverse the screen in the direction of the length of the race track, substantially as and for the purposes set forth. 80 85

9. A device substantially as herein shown and described for the purposes set forth. 90

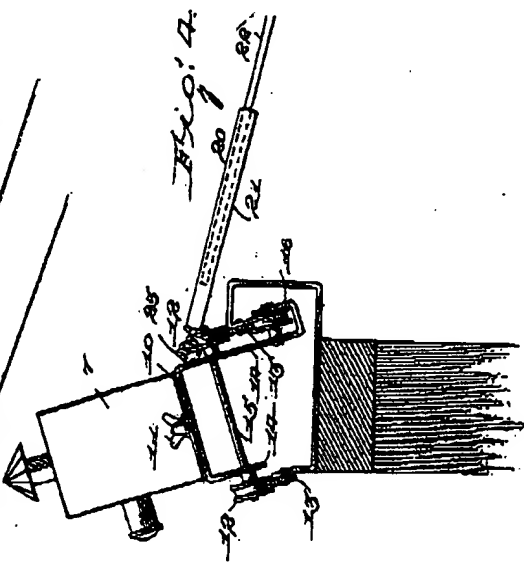
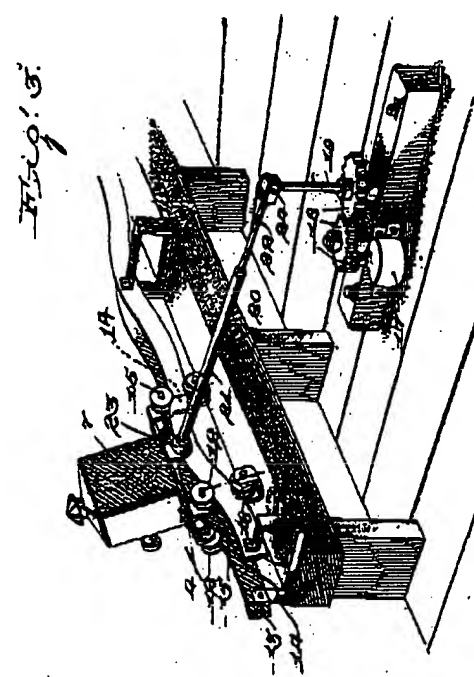
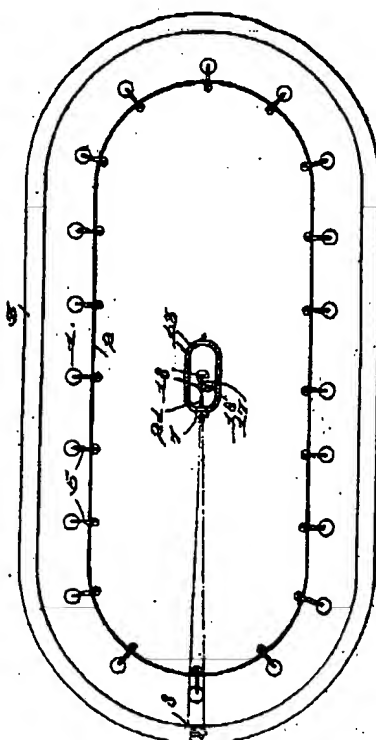
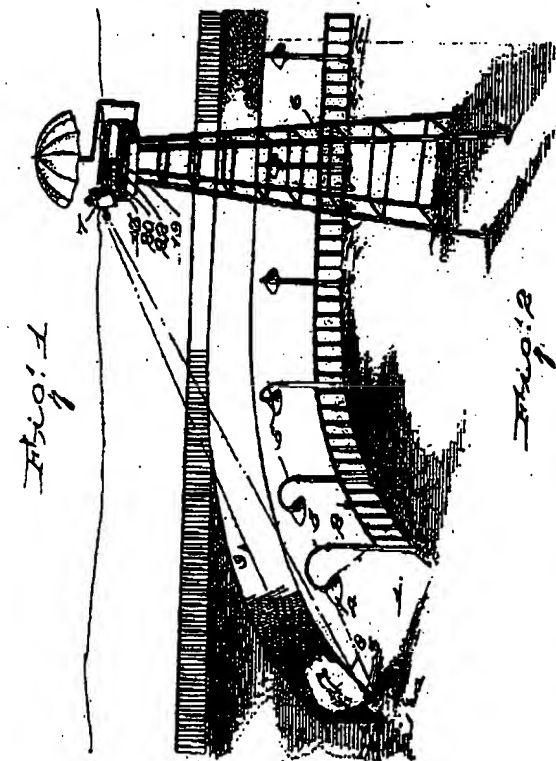
Dated the 22nd day of January, 1927.

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265,572 COMPLETE SPECIFICATION

2 SHEETS  
SHEET 1



[This Drawing is a reproduction of the Original on a reduced scale]

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